

Comparisons of Job Characteristics

Focus Occupation: Aerospace Engineering and Operations Technicians (17-3021)

Associated Occupation: Avionics Technicians (49-2091)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 88

Focus Occupation: Aerospace Engineering and Operations Technicians (17-3021)

Associated Occupation: Avionics Technicians (49-2091)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Computers and Electronics	8.4	14.7	17.3	>	Current knowledge level is likely sufficient
Engineering and Technology	5.7	13.0	23.6	>>	Current knowledge level is likely more than sufficient
Mathematics	9.2	12.3	11.2	0	Current knowledge level may be sufficient
Mechanical	6.8	9.6	17.3	>>	Current knowledge level is likely more than sufficient
Production and Processing	6.0	9.5	13.2	>>	Current knowledge level is likely more than sufficient
Telecommunications	3.9	6.3	6.6	0	Current knowledge level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 64

Focus Occupation: Aerospace Engineering and Operations Technicians (17-3021)

Associated Occupation: Avionics Technicians (49-2091)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Repairing	3.4	13.9	7.2	<<	Extensive development of skills in this area may be required
Troubleshooting	4.5	13.8	9.2	<<	Extensive development of skills in this area may be required
Equipment Maintenance	3.5	13.5	8.9	<<	Extensive development of skills in this area may be required
Quality Control Analysis	5.9	11.8	11.1	0	Current skill level may be sufficient
Operation Monitoring	6.6	11.5	11.0	0	Current skill level may be sufficient

Equipment Selection	3.3	9.1	6.1	<<	Extensive development of skills in this area may be required
Installation	1.7	5.4	3.7	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 93			
Focus Occupation: Aerospace Engineering and Operations Technicians (17-3021) Associated Occupation: Avionics Technicians (49-2091)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Problem Sensitivity	11.1	13.0	13.6	0	Current ability level may be sufficient
Information Ordering	9.9	11.8	11.6	0	Current ability level may be sufficient
Finger Dexterity	7.6	11.5	8.3	<<	Extensive improvement in abilities may be required
Visualization	7.5	11.0	10.1	0	Current ability level may be sufficient
Manual Dexterity	6.5	10.2	7.3	<<	Extensive improvement in abilities may be required
Control Precision	6.6	9.5	6.6	<<	Extensive improvement in abilities may be required
Visual Color Discrimination	6.4	8.5	8.7	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 98
Focus Occupation: Aerospace Engineering and Operations Technicians (17-3021) Associated Occupation: Avionics Technicians (49-2091)		
Work Activities	Exclusivity of Activity	
Calibrate or adjust electronic equipment or instruments to specification	67	
Conduct performance testing	66	
Install electronic equipment, components, or systems	62	
Install electronic power, communication, control, or security equipment or systems	76	
Install/connect electrical equipment to power circuit	57	
Operate industrial or nondestructive testing equipment	84	
Operate metal or plastic fabricating equipment/machinery	54	
Read blueprints	10	
Read schematics	34	
Read technical drawings	7	
Repair or replace electrical wiring, circuits, fixtures, or equipment	49	
Set up electronic system test equipment	99	

Understand service or repair manuals	40
Understand technical operating, service or repair manuals	6
Use aviation electronics	95
Use electrical or electronic test devices or equipment	40
Use hand or power tools	2
Use knowledge of metric system	39
Use precision measuring tools or equipment	17

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 79

Focus Occupation: Aerospace Engineering and Operations Technicians (17-3021)
Associated Occupation: Avionics Technicians (49-2091)

Tools and Technologies	Exclusivity
Computers	1
Content authoring and editing software	1
Cutting and crimping and punching tools	3
Electrical measuring and testing equipment	7
Fastener setting tools	12
Forming tools	2
Holding and clamping tools	3
Industry specific software	1
Ladders and scaffolding	6
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Light and wave generating and measuring equipment	4
Measuring and layout tools	3
Metals and metallurgy and structural materials testing instruments	15
Power tools	2
Respiratory protection	6
Rough and finishing tools	5
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Viewing and observing instruments and accessories	4
Vision protection and accessories	3
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.